UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,715	01/05/2001	Robert E. Sobol	10003856-1	5166

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HEWLETT-PACKARD COMPANY	WALLACE, SCOTT A

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2671	

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DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05 February 2004_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-45_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-43 and 45_ is/are rejected.
7)☒ Claim(s) _44_ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

Response to Amendment

1.   Applicant's request for reconsideration of the finality of the rejection of the last Office action is

persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-5, 7-9, 15-16, 22-23, 26, 28, 30-31, 33-34, 36-41, 45 are rejected under 35

U.S.C. 102(e) as being anticipated by Edanami, U.S. Patent No. 6,297,846.

4.   As per claims 1, 9 and 16, Edanami discloses a system for automatically cropping graphical

images (column 19 lines 13-20), comprising; memory for storing digital data that defines a graphical

image (fig 2, #12 and column 4 lines 64-67); an object detector configured to perform a search of said

digital data for an object of a particular type and to automatically identify, based on said search, a portion

of said digital data that defines an image of an object of said particular type within said graphical image

(column 4 lines 67 and column 5 lines 1-3); and an image cropper configured to automatically crop said

digital data (column 19 lines 13-20) based on a position of said object image within said graphical image

(column 4 lines 67 and column 5 lines 1-3), said image cropper configured to determine said position of

said object image within said graphical image based on said portion automatically identified by said object

detector (column 4 lines 67 and column 5 lines 1-3).

5.   As per claims 2, 10 and 17, Edanami discloses wherein said object image is an image of a person's face, wherein said object detector is configured to search said digital data for facial images (column 4 lines 67).

6.   As per claims 3, 11 and 18, Edanami discloses wherein said image cropper is configured to crop said digital data based on a size of said object image (column 5 lines 1-3).

7.   As per claims 4, 12 and 19, Edanami discloses wherein said image cropper is configured to crop said digital data based on said position of said object image such that said object image is substantially centered between two edges of said graphical image (fig 18 A).

8.   As per claim 5, Edanami discloses a system for automatically cropping graphical images (column 19 lines 13-20), comprising: memory for storing digital data that defines a graphical image (column 4 lines 64-67); an object detector configured to analyze said digital data and to automatically identify a graphical object within said graphical image (column 4 lines 64-67 and column 5 lines 1-3); and an image cropper configured to automatically crop said digital data based on a position of said graphical object within said graphical image such that said graphical object is removed from said graphical image (fig 2).

9.   As per claim 7, Edanami discloses an image capturing device configured to receive an image of a scene and to produce said digital data based on said image received by said image capturing device (fig 1, #1).

10.   As per claim 8, Edanami discloses wherein said image capturing device includes a lens for receiving said image of said scene and an image converter for producing said digital data based on said image of said scene (fig 2).

11.   As per claim 15, Edanami discloses a means for receiving an image of a scene and for producing said digital data based on said image received by said receiving means (fig 1).

12.   As per claim 23, Edanami discloses wherein said object detector is configured to make a determination as to whether said portion defines a facial image (column 4 line 67).

13.   As per claim 26, Edanami discloses wherein said graphical object is an image of a face (column 4 line 67).

14.   As per claim 28, Edanami discloses the step of making a determination as to whether said object image is a facial image, wherein said cropping step is based on said determination (fig 2).

15.   As per claims 30 and 33, Edanami discloses a system for automatically cropping graphical images (column 19 lines 13-20), comprising: memory for storing digital data that defines a graphical image (column 4 lines 64-67); an object detector configured to make a determination as to whether a portion of said digital data defines a facial image (column 4 line 67); and an image cropper configured to automatically crop said digital data based on said determination (fig 18A).

16.   As per claims 31 and 34, Edanami discloses wherein said image cropper is configured to automatically crop said digital data, if said portion defines said facial image, based on a position of said facial image with said facial image within said graphical image (column 4 lines 67 and column 5 lines 1-3 and fig 18A).

17.   As per claim 36, Edanami discloses a method for cropping a graphical image (fig 18A), comprising the steps of: detecting a plurality of faces in the graphical image (figs 19 A-E); determining if one of the faces is close to a center of the graphical image (fig 19B); and automatically cropping the graphical image (column 19 lines 13-20).

18.   As per claim 37, Edanami discloses determining a location in the graphical image of each of the plurality of faces (fig 19B).

19.   As per claim 38, Edanami discloses wherein the step of cropping the graphical image comprises positioning one of the plurality of faces closer to the center (fig 19 B).

20.   As per claim 39, Edanami discloses wherein if one face of the plurality of faces is close to the center, then cropping the graphical image to move the one face closer to the center (fig 19 B).

21.   As per claim 40, Edanami discloses wherein if one face of the plurality of faces is closer to the center, then cropping the graphical image to remove at least one other face of the plurality of faces (figs 19 B-E).

22.   As per claim 41, Edanami discloses a method for cropping a graphical image, comprising the steps of: detecting a face in a digital image of a picture (column 4 lines 67); and automatically cropping

(column 19 lines 13-20) the digital image based on a size of the face relative to the digital image (column 5 lines 1-3).

23.   As per claim 22, Edanami discloses wherein the step of automatically cropping further comprises the step of moving the face closer to a center of the picture (figs 19, B-E).

24.   As per claim 45, Edanami disclose wherein said cropping step is based on said determining step (fig 18).

25.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edanami.

26.   As per claim 21, although Edanami does not specifically disclose the searching and cropping steps are automatically performed in response to said storing step. It would have been obvious to one of ordinary skill in the art because Edanami is clipping images from the movement of the participants. Therefore a complete frame with the exact position would have to be stored first before the cropping could take place, otherwise you might not have the complete image with the area of ineterest.

Claim Rejections - 35 USC § 103

27.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

28.   Claims 6, 14, 22, 27, 29, 32, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edanami in view of Parulski et al., U.S. Patent No. 6,650,366.

29.   As per claims 6, 14, 22, 27 and 32 Edanami does not disclose an input device for receiving an input from a user; and a system manager configured to enable said image cropper based on said user

input. This is disclosed in Parulski et al in fig 1. It would have been obvious to one of ordinary skill in the art to set the cropping based on user input as in Parulski with the system of Edanami because this would allow more flexibility in the cropping process.

30.   As per claims 29 and 35, Edanami discloses that the object image is a facial image (fig 2). However, Edanami does not disclose wherein cropping step comprises the step of removing said object image from graphical image. This is disclosed in Parulski et al in fig 1. It would have been obvious to one of ordinary skill in the art to set the cropping based on user input as in Parulski with the system of Edanami because this would allow more flexibility in the cropping process.

31.   Claims 13, 20, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edanami in view of Riley, U.S. Patent No. 6,009,197.

32.   As per claim 13, 20, 24, Edanami discloses wherein said cropping means crops said digital data based on said position of said object image (fig 2). However, Edanami does not disclose wherein said object image is completely removed from said graphical image. This is disclosed in Riley in column 3 lines 49-54. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use cropping to remove images as in Riley with the system of Edanami because this would get rid of unwanted areas and therefore reduce the size of data and the memory required to store it.

33.   As per claim 25, Edanami discloses wherein the object image comprises an image of a face (column 4 line 67).

Allowable Subject Matter

34.   Claim 44 is objected to as being dependent upon a rejected base claim, but would be allowable if

rewritten in independent form including all of the limitations of the base claim and any intervening claims.

        Any inquiry concerning this communication or earlier communications from the examiner should

be directed to **Scott Wallace** whose telephone number is **703-605-5163**.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Mark Zimmerman, can be reached at 703-305-9798.

        Any response to this action should be mailed to:

                Commissioner of Patents and Trademarks

                Washington, D.C. 20231

        or faxed to:

                (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA,

Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be

directed to the Technology Center 2600 Customer Service Office whose telephone number is

(703) 306-0377.

MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600